



Simple Techniques for Efficient Landscape Watering

Water, don't drown, your trees and shrubs

Trees and shrubs around your home add value to your property and need to be watered regularly to remain healthy. Over-watering, however, can damage or even kill plants and leave you with high water bills. How much water does your trees and shrubs really need? How often should they be watered? Where should it be applied? The answers to these questions depend upon several important factors.

- Weather
- Plant Maturity and Type
- Root Depth
- Soil Type

Learning to water efficiently is easy. Here are some basic guidelines about how to properly water any tree or shrub.

How should I water?

Follow these tips for the type of irrigation system you use:

Drip Systems – Most drip systems do not have enough well-placed emitters. Add emitters and increase the area watered as the plant grows.

Blubbers – Be sure the basins are level and extend beyond the edge of the canopy.

Hoses — A perforated soaker hose is a good device for watering shrubs and trees.

Where should I water?

The soil surrounding the plant's roots, called the "root zone", serves as a storage tank from which the plant draws moisture. Most of the roots spread 1-1/2 to 3 times as wide as the plant's canopy and usually penetrate 2 to 3 feet deep, depending upon the size of the plant. Shallow or compacted soils can cause shorter and wider root zones. Water the complete root zone each time you irrigate.

How much should I water?

Be sure to completely fill the root zone every time you water. A good way to test how deeply you have watered is to stick a thin metal rod into the ground soon after you irrigate. The rod should easily slide through the wet soil and become difficult to push when reaching dry soil. If the water spreads more than it soaks in, the soil may be compacted. Because neither water nor roots penetrate compacted soil very well, you should consider aerating the ground. Consult your local nursery for advice on how to aerate properly.

How long should I water?

The amount of time needed to sufficiently water your plants depends on three things: (1) type of watering method used; (2) size of root zone; (3) type of soil. Monitor how quickly the water soaks in, using the rod method. Once you have determined how long it takes to fill the root zone, try to irrigate the same amount of time whenever you water.

How often should I water?

The trick to efficient watering is how often you water. How often your plants need water depends upon the weather, the type and maturity of the plant, the root depth, and the soil type.

Weather – Plants use 3 to 5 times as much water during the hot, dry summer as they do during the winter. Adjust your watering schedule with the season and when there are significant changes in the weather

Plant maturity and type – To prevent wilting, young plants should be watered more often than older plants. After they have become established, in one or two years, allow a slight drought between waterings. The plants will adapt to the stress and become more drought tolerant. Water consumption rates vary greatly among plant species. High water use plants, like roses, need to be irrigated about twice as often as established arid region plants.

Root Depth – Root depth also has a major impact on how often plants need water. The deeper the roots, the less frequently you will need to water. Encourage a deep, drought-resistant root zone by watering deeply. A good rule of thumb is to irrigate when the top 1/3 to 1/2 of the root zone is dry.

Soil Type – If your soil is shallow, compacted, or sandy you will have to irrigate more frequently.

Signs of Under- and Over-Watering

Under-Watering

- Soil is dry
- Older leaves turn yellow or brown and drop off
- Leaves are wilted
- Leaves curl

Over-Watering

- Soil is constantly damp
- Leaves turn a lighter shade of green or turn yellow
- Young shoots are wilted
- Leaves are green yet brittle
- Algae and mushrooms are growing

Tips for Efficient Watering

- Apply 3 – 4 inches of mulch under the plant canopy. Mulch retains soil moisture and discourages weeds. Do not lay plastic over the soil.
- Avoid sprinkling tree and shrub leaves with water. Salt in the water can damage the foliage
- Control weeds, including turf grass, that compete for your plant's water.
- If you water by hand, install a faucet timer and use a soaker hose.
- Once or twice a year, water twice as long as you normally do to help leach salts out of the root zone
- Expand the area you water as the plant grows.
- Prevent runoff! Retain the water in a basin around the plant or water at a slower rate.